



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION

## NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

Tischler und Sohn (USA) Ltd.  
Six Suburban Avenue  
Stamford, CT 06901

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER – Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/ or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

### DESCRIPTION: Series "Mahogany Impact Outswing Casement" Wood Fixed Window – L.M.I.

**APPROVAL DOCUMENT:** Drawing No. 1533, titled "Out-Swing Impact Wood Fixed Casement Window", sheets 01 through 06 of 06, dated 04/03/08, with revision "B1", dated 09/04/13, prepared by W. W. Schaefer Engineering & Consulting, P. A., signed and sealed by Warren W. Schaefer, P. E., bearing the Miami-Dade County Product Control Section Revision stamp with the Notice of Acceptance number and Expiration date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, Wedel (Schleswig-Holstein), Germany, series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/ or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA No. 13-1105.07 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Jaime D. Gascon, P. E.



J. Gascon  
7/1/14

NOA No. 14-0428.20  
Expiration Date: January 08, 2019  
Approval Date: July 10, 2014  
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.  
*(Submitted under previous NOA No. 08-0804.13)*
2. Drawing No. 1533, titled "Out-Swing Impact Wood Fixed Casement Window", sheets 01 through 06 of 06, dated 04/03/08, with revision "B1", dated 09/04/13, prepared by W. W. Schaefer Engineering & Consulting, P. A., signed and sealed by Warren W. Schaefer, P. E.  
*(Submitted under previous NOA No. 13-1105.07)*

**B. TESTS**

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94  
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94  
3) Water Resistance Test, per FBC, TAS 202-94  
4) Large Missile Impact Test per FBC, TAS 201-94  
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94  
6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94  
along with marked-up drawings and installation diagram of wood fixed and operable wood casement windows, prepared by Architectural Testing, Inc., Test Reports No. ATI-77324.01-109-18, dated 06/30/08, signed and sealed by Michael D. Stremmel, P. E.  
*(Submitted under NOA No. 08-0804.13)*

**C. CALCULATIONS**

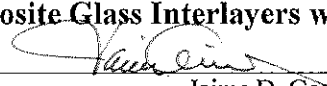
1. Anchor verification calculations and structural analysis, complying with FBC-2004 and FBC-2007, prepared by W. W. Schaefer Engineering & Consultant, P. A., dated 07/28/08, and updated to FBC-2010 on 10/28/13, signed and sealed by Warren W. Schaefer, P. E.  
*(Submitted under previous NOA No. 13-1105.07)*
2. Glazing complies with ASTM E1300-04/ 09

**D. QUALITY ASSURANCE**

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

**E. MATERIAL CERTIFICATIONS**

1. Notice of Acceptance No. 12-1231.10 issued to **Eastman Chemical Company (MA)** for their "**Saflex Clear and Color Glass Interlayers**" dated 03/28/13, expiring on 05/21/16.
2. Notice of Acceptance No. 12-1231.08 issued to **Eastman Chemical Company (MA)** for their "**Saflex CP - Saflex and Saflex HP Composite Glass Interlayers with PET Core**" dated 03/28/13, expiring on 12/11/18.

  
Jaime D. Gasson, P. E.  
Product Control Section Supervisor  
NOA No. 14-0428.20  
Expiration Date: January 08, 2019  
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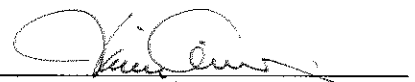
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

**F. STATEMENTS**

1. Statement letter of conformance, and compliance with **FBC 5<sup>th</sup> Edition (2014)**, issued by W. W. Schaefer Engineering & Consulting, P. A., dated 04/15/14, signed and sealed by Warren W. Schaefer, P. E.
2. Statement letter of conformance, and compliance with **FBC 2010**, issued by W. W. Schaefer Engineering & Consulting, P. A., dated 09/03/13, signed and sealed by Warren W. Schaefer, P. E.  
*(Submitted under previous NOA No. 13-1105.07)*
3. Statement letter of independence and no financial interest, issued by W. W. Schaefer Engineering & Consulting, P. A., dated 09/04/13, signed and sealed by Warren W. Schaefer, P. E.  
*(Submitted under previous NOA No. 13-1105.07)*
4. Distributor Agreement between Tischler und Sohn (USA), Ltd., Connecticut, USA, and Tischler/ Cornelius Korn, G.m.b.H., Wedel (Schleswig-Holstein), Germany, dated 04/13/09, signed by Tim Carpenter and Wilhelm Korn, respectively.  
*(Submitted under previous NOA No. 11-1101.09)*
5. Laboratory compliance letters for Test Report No. **ATI-77324.01-109-18**, issued by Architectural Testing, Inc., dated 07/01/08, all signed and sealed by Michael D. Stremmel, P.E.  
*(Submitted under NOA No. 08-0804.13)*

**G. OTHERS**

1. Notice of Acceptance No. **13-1105.07**, issued to Tischler und Sohn (USA), Ltd. for their Series "**Mahogany Impact Outswing Casement Wood Fixed Window - L.M.I.**", approved on 12/26/13 and expiring on 01/08/19.



Jaime D. Gascon, P. E.  
Product Control Section Supervisor  
NOA No. 14-0428.20  
Expiration Date: January 08, 2019  
Approval Date: July 10, 2014

# GENERAL NOTES:

1. THESE WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT WINDOWS.
5. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE WINDOWS.
7. ALL ANCHORS SECURING WINDOW FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
8. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF  $K_d = 0.85$  MAY BE APPLIED PER THE ASCE 7 STANDARD.
9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR  $C_d = 1.6$  WAS USED FOR WOOD SCREW ANALYSIS ONLY.
10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.
11. ALL WOOD MEMBERS OF WINDOWS THAT MAY POSSIBLY COME INTO CONTACT WITH MASONRY OR CONCRETE SUBSTRATES, ARE SUBJECT TO MOISTURE &/OR ARE SUBJECT TO THE OUTSIDE ENVIRONMENT SHALL BE OF AN APPROVED DURABLE SPECIES OR BE TREATED IN AN APPROVED METHOD WITH AN APPROVED PRESERVATIVE PER FBC SECTION 2326.

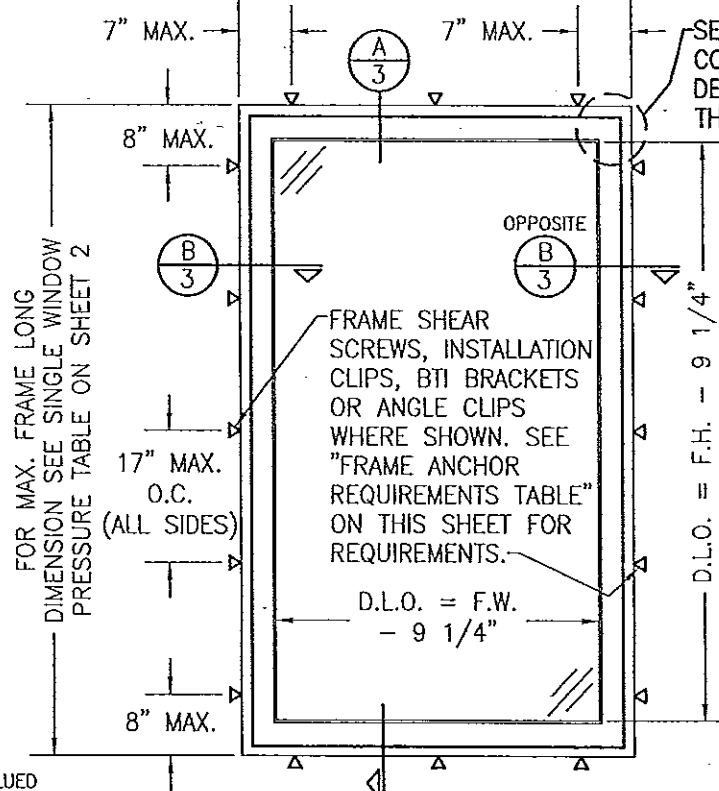
## CORNER CONSTRUCTION:

RECTANGULAR FRAME CORNERS: MORTISE & TENON CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
 ARCHED FRAME CORNERS: ARCHED FRAME BUTTED TO STRAIGHT FRAME, JOINED WITH ONE(1) NO.14 X 3" WOOD SCREW, & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
 HALF ROUND FRAME CORNERS: FINGER JOINT CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
 RECTANGULAR SASH CORNERS: MORTISE & TENON CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
 ARCHED SASH CORNERS: ARCHED SASH BUTTED TO STRAIGHT SASH, JOINED WITH ONE(1) NO.14 X 3" WOOD SCREW, & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.  
 HALF ROUND SASH CORNERS: FINGER JOINT CONSTRUCTION JOINED & GLUED WITH PONAL SUPER 3 WOOD GLUE OR EQUIVALENT.

## FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME/CLIP/BACKET TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 14 SMS/WOOD SCREW OR 1/4" BTI SCREW	1 1/4"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	(2) 1/4-14 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	(2) 1/4-14 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	(2) 1/4-14 SELF TAP/DRILLING SCREW	FULL	1/2"
G-90 CMU/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
INSTALLATION CLIP SCREWS			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 12 X 1 1/2" SMS	1 3/8"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	(2) 12-14 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	(2) 12-14 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	(2) 12-14 SELF TAP/DRILLING SCREW	FULL	1/2"
G-90 CMU/2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
BTI BRACKET & ANGLE CLIP SCREWS			
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 8 X 1 1/2" SMS	1 1/8"	3/4"
MIN. 18 GA. 33 KSI METAL STUD	(2) 8-18 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	(2) 8-18 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	(2) 8-18 SELF TAP/DRILLING SCREW	FULL	1/2"
(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS, ELCO CRETE-FLEX OR HILTI KWIK-CON II (HARDENED STEEL OR S.S.).			
(2) ALL SELF TAP/DRILLING SCREWS SHALL BE MIN. GR. 5			

FOR MAX. FRAME SHORT DIMENSION SEE SINGLE WINDOW PRESSURE TABLE ON SHEET 2.



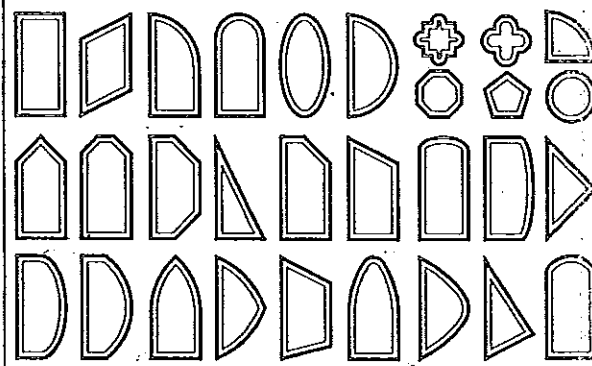
## EXTERIOR ELEVATION: SINGLE FIXED WINDOW

SCALE: 1/2" = 1'-0"

LONG DIMENSION OF WINDOW MAY BE HORIZONTAL OR VERTICAL (HEIGHT & WIDTH MAY BE INTERCHANGED).

RECTANGULAR WINDOWS SHOWN. ANCHORING OF SHAPED WINDOWS IS THE SAME WITH REQUIRED ANCHOR SPACING ALONG THE FRAME CIRCUMFERENCE BEING THE SAME AS SPECIFIED FOR A STRAIGHT FRAME.

## APPROVED SHAPES



## NOTES:

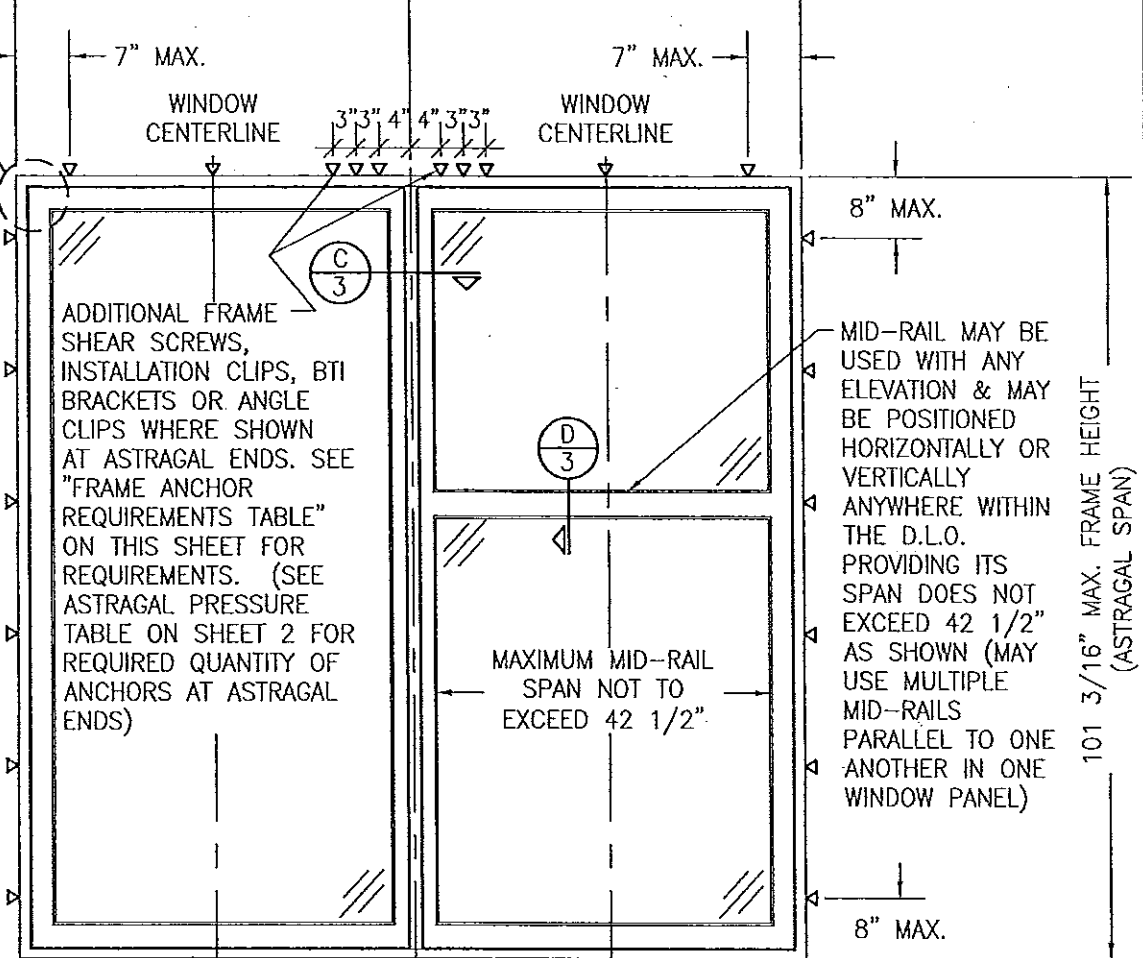
1. OTHER SHAPES MAY APPLY PROVIDING THEY ARE SIMILAR TO THOSE SHOWN & HAVE CORNER CONSTRUCTION AS DESCRIBED IN THIS DRAWING.
2. ALL SHAPED UNITS MUST FIT INSCRIBED INTO THE ALLOWABLE RECTANGULAR UNITS & BE GOVERNED BY THE ALLOWABLE PRESSURE OF THE RESPECTIVE RECTANGULAR UNIT.
3. THE SHAPES SHOWN APPLY TO SINGLE WINDOWS AND THE WINDOWS ON EITHER SIDE OF A FIXED ASTRAGAL.

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

DRAWING NO. 1533		REV. B		WARREN W. SCHAEFER, P.E.	
SHEET NO. 1 OF 6					
<div>CERTIFICATION</div> <div>SEP 04 2013</div> <div>WARREN W. SCHAEFER, P.E.</div>					
DRAWING TITLE		CONSULTANTS			
OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW		W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
MANUFACTURER		TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 06307-674-0600			
NO.	REVISION DESCRIPTION	BY	DATE	DRAWN BY: W.R.M.	
A1	UPDATE TO CURRENT STANDARDS	W.R.M.	10/25/11	CHECKED BY: W.R.M.	
B1	UPDATE CLASS DESCRIPTION	W.R.M.	09/04/13	PLOT: 1-24	
				DATE: 04/03/03	

MAX. FRAME WIDTH PER SINGLE WINDOW ELEVATION

MAX. FRAME WIDTH PER SINGLE WINDOW ELEVATION



## EXTERIOR ELEVATION: DOUBLE FIXED WINDOW WITH FIXED ASTRAGAL

SCALE: 1/2" = 1'-0"

SEE SINGLE WINDOW ELEVATION FOR WINDOW DETAIL NOT SHOWN

ALLOWABLE DESIGN PRESSURE (ALL CONDITIONS)

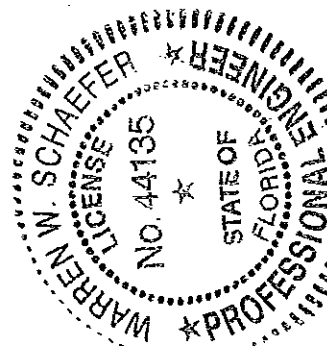
SEE LOAD TABLES ON SHEET 2

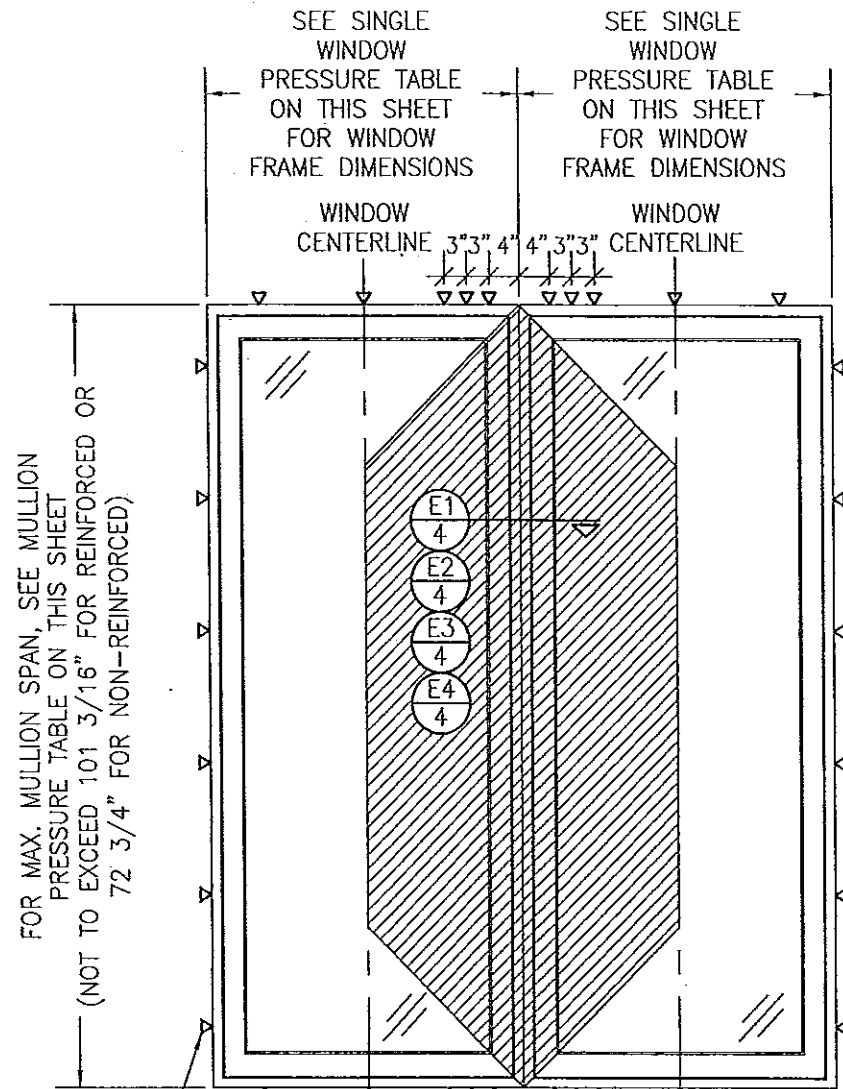
## PRODUCT REVISED

as complying with the Florida Building Code  
 Acceptance No. 14-0428.20  
 Expiration Date 03/08/2019  
 By: [Signature]  
 Miami Dade Product Control

## PRODUCT REVISED

as complying with the Florida Building Code  
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 By: [Signature]  
 Miami Dade Product Control





FOR MAX. MULLION SPAN, SEE MULLION PRESSURE TABLE ON THIS SHEET (NOT TO EXCEED 101 3/16" FOR REINFORCED OR 72 3/4" FOR NON-REINFORCED)

SEE SINGLE WINDOW ELEVATION FOR FRAME ANCHOR REQUIREMENTS & POSITIONS AROUND WINDOWS

**EXTERIOR ELEVATION:  
MULTIPLE FIXED WINDOWS**

SCALE: 1/2" = 1'-0"

(RECTANGULAR WINDOWS SHOWN, SHAPED WINDOWS ALSO APPLY)

ADDITIONAL FRAME SHEAR SCREWS, INSTALLATION CLIPS, BTI BRACKETS OR ANGLE CLIPS WHERE SHOWN AT MULLION ENDS. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR REQUIREMENTS. (SEE MULLION PRESSURE TABLE FOR REQUIRED QUANTITY OF ANCHORS AT MULLION ENDS)

FOR MAX. LOAD WIDTH, SEE MULLION PRESSURE TABLE ON THIS SHEET

**MULTIPLE UNIT NOTES:**

1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATIONS.
2. MULLION MAY BE HORIZONTAL OR VERTICAL PROVIDING UNIT SIZES ARE RESTRICTED AS SHOWN IN THIS ELEVATION.
3. IF VERTICALLY STACKED, THE MANUFACTURER SHALL INSURE THAT THE DEAD LOAD WEIGHT OF THE WINDOWS CAN NOT CAUSE UNDO FAILURE.
4. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
5. INDIVIDUAL WINDOW SIZES SHALL BE RESTRICTED AS SPECIFIED IN THE SINGLE WINDOW ELEVATIONS.

ALLOWABLE SINGLE WINDOW PRESSURE TABLE						
MAXIMUM FRAME LONG DIMENSION (IN.)	MAXIMUM FRAME SHORT DIMENSION (IN.)	ALLOWABLE PRESSURE (+/- PSF)				
		GLASS OPTIONS 1, 4 & 5	GLASS OPTION 2		GLASS OPTION 3	GLASS OPTION 6
			POS.	NEG.		
144	35	70.0	70.0	70.0	70.0	70.0
	27	70.0	70.0	85.0	70.0	70.0
132	39	70.0	70.0	70.0	70.0	70.0
	29	70.0	70.0	85.0	70.0	70.0
120	42	70.0	70.0	70.0	70.0	70.0
	32	70.0	70.0	85.0	70.0	70.0
108	47	70.0	70.0	70.0	69.0	70.0
	43	70.0	70.0	70.0	70.0	70.0
	36	70.0	70.0	85.0	70.0	70.0
101	52	70.0	70.0	70.0	65.9	70.0
	49	70.0	70.0	70.0	68.3	70.0
	43	70.0	70.0	70.0	70.0	70.0
	38	70.0	70.0	85.0	70.0	70.0
96	53	N/A	70.0	70.0	70.0	70.0
	40	70.0	70.0	85.0	70.0	70.0
84	61	N/A	70.0	70.0	70.0	70.0
	46	70.0	70.0	85.0	70.0	70.0
77	66	N/A	70.0	70.0	70.0	70.0
	51	70.0	70.0	85.0	70.0	70.0
73	70	N/A	70.0	70.0	70.0	70.0
	53	N/A	70.0	85.0	70.0	70.0
72	72	N/A	70.0	85.0	70.0	70.0
67	58	N/A	70.0	85.0	70.0	70.0
63	62	N/A	70.0	85.0	70.0	70.0

1. SEE GLAZING DETAILS FOR GLASS OPTIONS.  
2. "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT GLASS OPTION.  
3. WINDOW SIZES SHOWN ARE MAXIMUM SIZES. SMALLER SIZES SHALL APPLY TO LOADS EQUAL TO THE NEAREST LARGER SIZE SHOWN IN TABLE.  
4. LONG DIMENSION MAY BE HORIZONTAL OR VERTICAL  
5. DIMENSIONS SHOWN ARE +/-1/2".

ASTRAGAL ALLOWABLE DESIGN PRESSURE					
MAXIMUM ASTRAGAL SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)			
		4 END ANCHORS		6 END ANCHORS	
		POS.	NEG.	POS.	NEG.
101	72	52.2	52.2	53.6	N/A
	67	54.0	54.0	56.1	N/A
	61	56.8	56.8	59.7	N/A
	55	60.4	60.4	64.8	N/A
	49	65.1	65.1	70.0	71.0
	43	70.0	71.4	70.0	77.8
	37	70.0	80.0	70.0	85.0
96	31	70.0	85.0	70.0	85.0
	72	56.5	56.5	60.7	60.7
	67	58.3	58.3	63.3	63.3
	61	61.1	61.1	66.6	66.6
	55	64.8	64.8	70.0	70.6
	49	69.7	69.7	70.0	75.9
	43	70.0	76.2	70.0	83.0
84	37	70.0	85.0	70.0	85.0
	72	70.0	70.6	70.0	77.0
	67	70.0	72.2	70.0	78.6
	61	70.0	74.8	70.0	81.5
	55	70.0	78.6	70.0	85.0
	49	70.0	83.7	70.0	85.0
	43	70.0	85.0	70.0	85.0
77	72	70.0	82.7	70.0	85.0
	67	70.0	83.8	70.0	85.0
	61	70.0	85.0	70.0	85.0
72 3/4	72	70.0	85.0	70.0	85.0

NOTES:  
1. LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW CENTERLINES.  
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.  
3. DIMENSIONS SHOWN ARE +/-1/2".

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By *[Signature]*  
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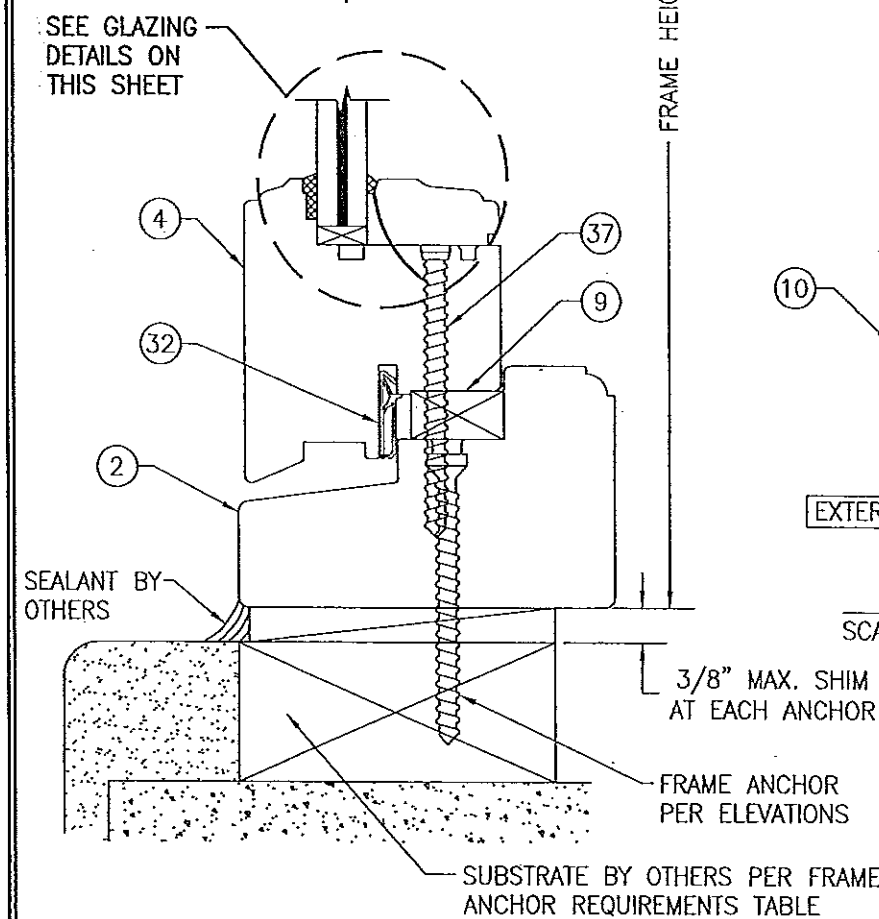
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By *[Signature]*  
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MULLION ALLOWABLE DESIGN PRESSURE							
MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)					
		NON-REINFORCED		REINFORCED		4 OR 6 END ANCHORS	6 END ANCHORS
		POS.	NEG.	POS.	NEG.		
101	72	N/A	N/A	41.8	41.8	44.3	44.3
	67	N/A	N/A	43.3	43.3	46.3	46.3
	61	N/A	N/A	45.5	45.5	49.3	49.3
	55	N/A	N/A	48.4	48.4	53.5	53.5
	49	N/A	N/A	52.2	52.2	58.9	58.9
	43	N/A	N/A	57.3	57.3	65.8	65.8
	37	N/A	N/A	64.2	64.2	70.0	74.3
96	31	N/A	N/A	70.0	73.9	70.0	85.0
	72	N/A	N/A	45.3	45.3	50.1	50.1
	67	N/A	N/A	46.8	46.8	52.3	52.3
	61	N/A	N/A	49.0	49.0	55.5	55.5
	55	N/A	N/A	52.0	52.0	59.9	59.9
	49	N/A	N/A	55.9	55.9	64.7	64.7
	43	N/A	N/A	61.1	61.1	70.0	70.8
84	37	N/A	N/A	68.3	68.3	70.0	79.1
	72	N/A	N/A	56.7	56.7	65.6	65.6
	67	N/A	N/A	57.9	57.9	67.0	67.0
	61	N/A	N/A	60.0	60.0	69.5	69.5
	55	N/A	N/A	63.0	63.0	73.0	73.0
	49	N/A	N/A	67.2	67.2	70.0	77.8
	43	N/A	N/A	70.0	72.9	70.0	84.4
77	37	N/A	N/A	70.0	80.8	70.0	85.0
	72	N/A	N/A	66.3	66.3	70.0	76.8
	67	N/A	N/A	67.2	67.2	70.0	77.8
	61	N/A	N/A	69.0	69.0	70.0	80.0
	55	N/A	N/A	70.0	71.9	70.0	83.3
	49	N/A	N/A	70.0	76.1	70.0	85.0
	43	N/A	N/A	70.0	82.1	70.0	85.0
72 3/4	37	N/A	N/A	70.0	85.0	70.0	85.0
	72	48.6	48.6	70.0	74.0	70.0	85.0
	67	49.1	49.1	70.0	74.5	70.0	85.0
	61	50.5	50.5	70.0	76.0	70.0	85.0
	55	52.9	52.9	70.0	78.7	70.0	85.0
	49	54.7	54.7	70.0	82.8	70.0	85.0
	43	62.0	62.0	70.0	85.0	70.0	85.0
67	37	70.0	70.0	70.0	85.0	70.0	85.0
	31	70.0	80.7	70.0	85.0	70.0	85.0
	25	70.0	85.0	70.0	85.0	70.0	85.0
	67 OR GREATER	62.1	62.1	70.0	85.0	70.0	85.0
	61	63.1	63.1	70.0	85.0	70.0	85.0
	55	65.1	65.1	70.0	85.0	70.0	85.0
	52	66.9	66.9	70.0	85.0	70.0	85.0
61	49	69.0	69.0	70.0	85.0	70.0	85.0
	43	70.0	74.9	70.0	85.0	70.0	85.0
	37	70.0	83.7	70.0	85.0	70.0	85.0
	31	70.0	85.0	70.0	85.0	70.0	85.0
	61 OR GREATER	70.0	82.3	70.0	85.0	70.0	85.0
	55	70.0	83.8	70.0	85.0	70.0	85.0
	52	70.0	85.0	70.0	85.0	70.0	85.0
55	55 OR GREATER	70.0	85.0	70.0	85.0	70.0	85.0

NOTES:  
1. LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW CENTERLINES.  
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.  
3. "N/A" DESIGNATES A SIZE NOT APPLICABLE TO THAT REINFORCEMENT CONDITION.  
4. SIZE VALUES IN TABLE ARE +/-1/2"

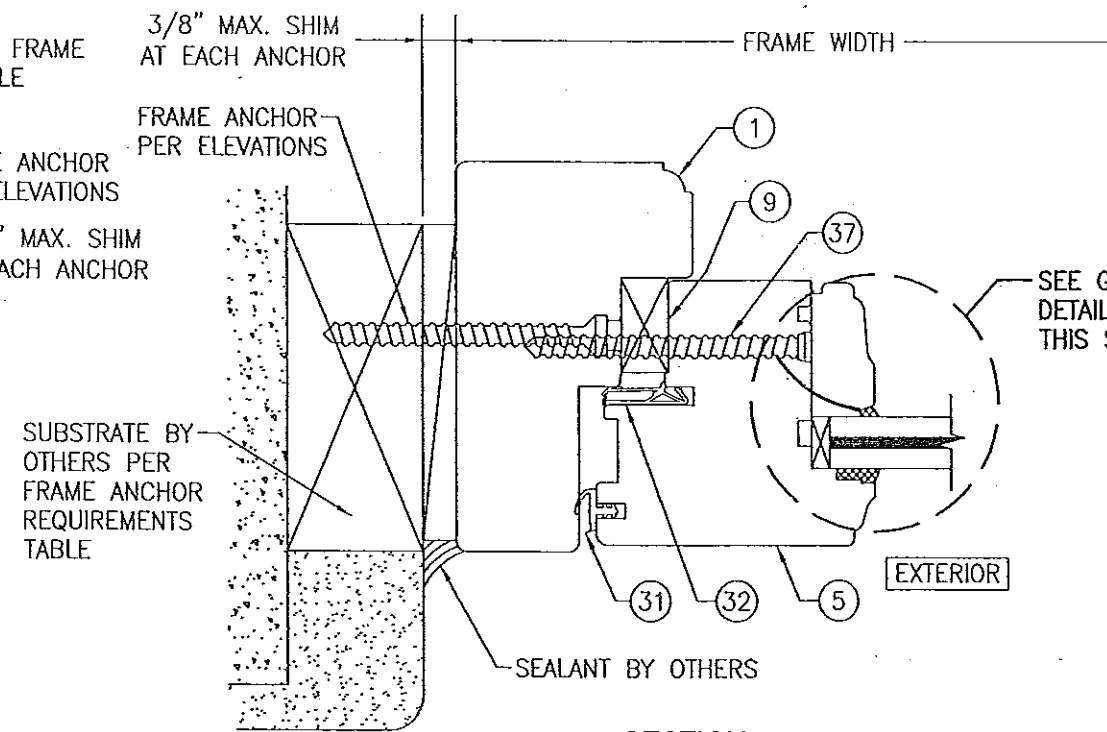
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PLOT: 1-24	DATE: 04/03/08
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW	
MANUFACTURER TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
DRAWING NO. 1533	
SHEET NO. 2 OF 6	

SEP 04 2013



SECTION \_\_\_\_\_  
SCALE: 1/2" = 1' FULL

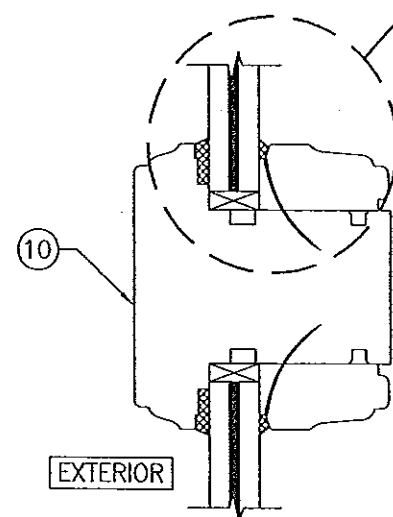
FRAME SHEAR SCREW INSTALLATION SHOWN. SEE  
OPTIONAL DETAILS FOR OTHER INSTALLATION CONDITIONS.



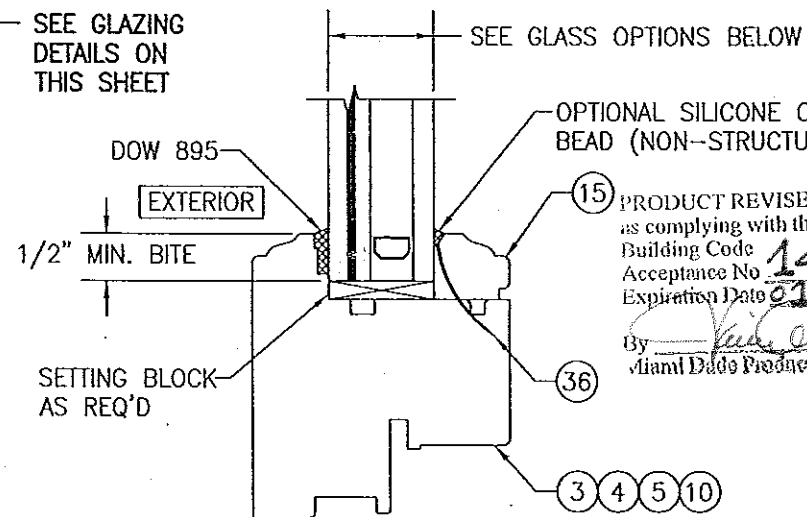
SECTION B  
3

SCALE: 1/2" = 1' FULL

FRAME SHEAR SCREW INSTALLATION SHOWN. SEE  
OPTIONAL DETAILS FOR OTHER INSTALLATION CONDITIONS.



SECTION D  
3  
SCALE: 1/2" = 1' FULL



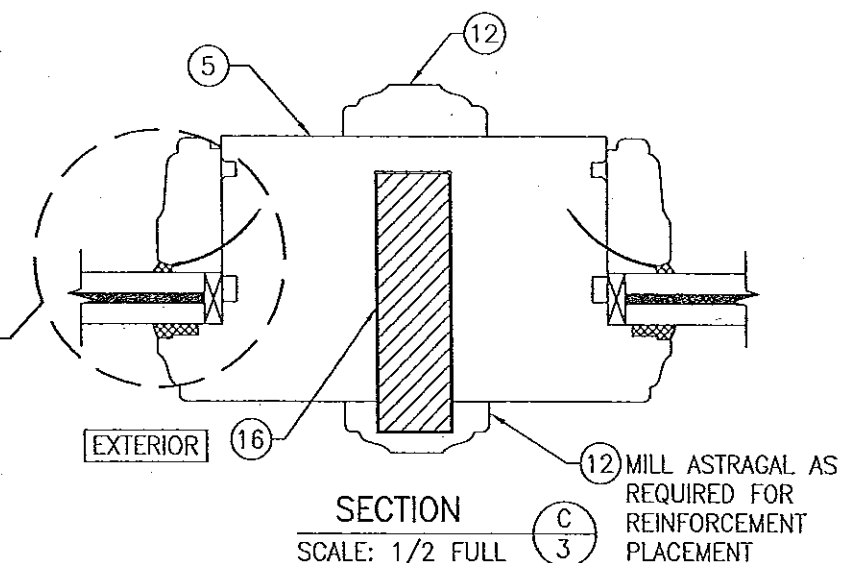
I.G. GLAZING DETAIL  
GLASS OPTIONS 4, 5 & 6

GLASS OPTION 4: 1 3/16" LAMINATED I.G.  
(3/16" AN./0.09" EASTMAN CHEMICAL CO.  
SAFLEX/3/16" AN./1/2" AIR SPACE/1/4 AN.)

GLASS OPTION 5: 1 3/16" LAMINATED I.G.  
(3/16" AN./0.09" EASTMAN CHEMICAL CO.  
SAFLEX/3/16" AN./1/2" AIR SPACE/1/4 TEMP.)

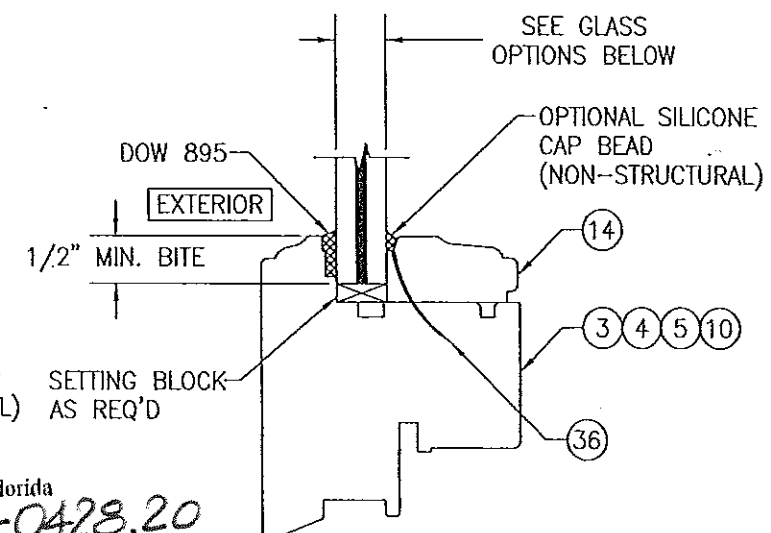
GLASS OPTION 6: 1 3/16" LAMINATED I.G. (3/16"  
H.S./0.075" EASTMAN CHEMICAL CO. SAFLEX  
CP/3/16" H.S./1/2" AIR SPACE/1/4 TEMP.)

NOTE: THE SINGLE PANE OF THE IG GLASS SHALL BE TEMPERED WHEN REQUIRED TO CONFORM WITH SECTION 2406 OF THE FLORIDA BUILDING CODE FOR USE OF GLASS IN HAZARDOUS LOCATIONS.



SECTION C  
3

SCALE: 1/2" FULL



NON-I.G. GLAZING DETAIL  
GLASS OPTIONS 1, 2 & 3

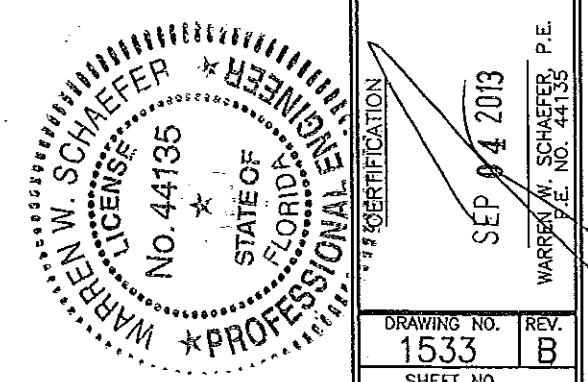
GLASS OPTION 1: 9/16" LAMINATED GLASS (1/4"  
AN./0.09" EASTMAN CHEMICAL CO. SAFLEX/1/4" AN.)

GLASS OPTION 2: 9/16" LAMINATED GLASS (1/4"  
H.S./0.075" EASTMAN CHEMICAL CO. SAFLEX CP/1/4" H.S.)

GLASS OPTION 3: 9/16" LAMINATED GLASS (1/4"  
AN./0.075" EASTMAN CHEMICAL CO. SAFLEX CP/1/4" AN.)

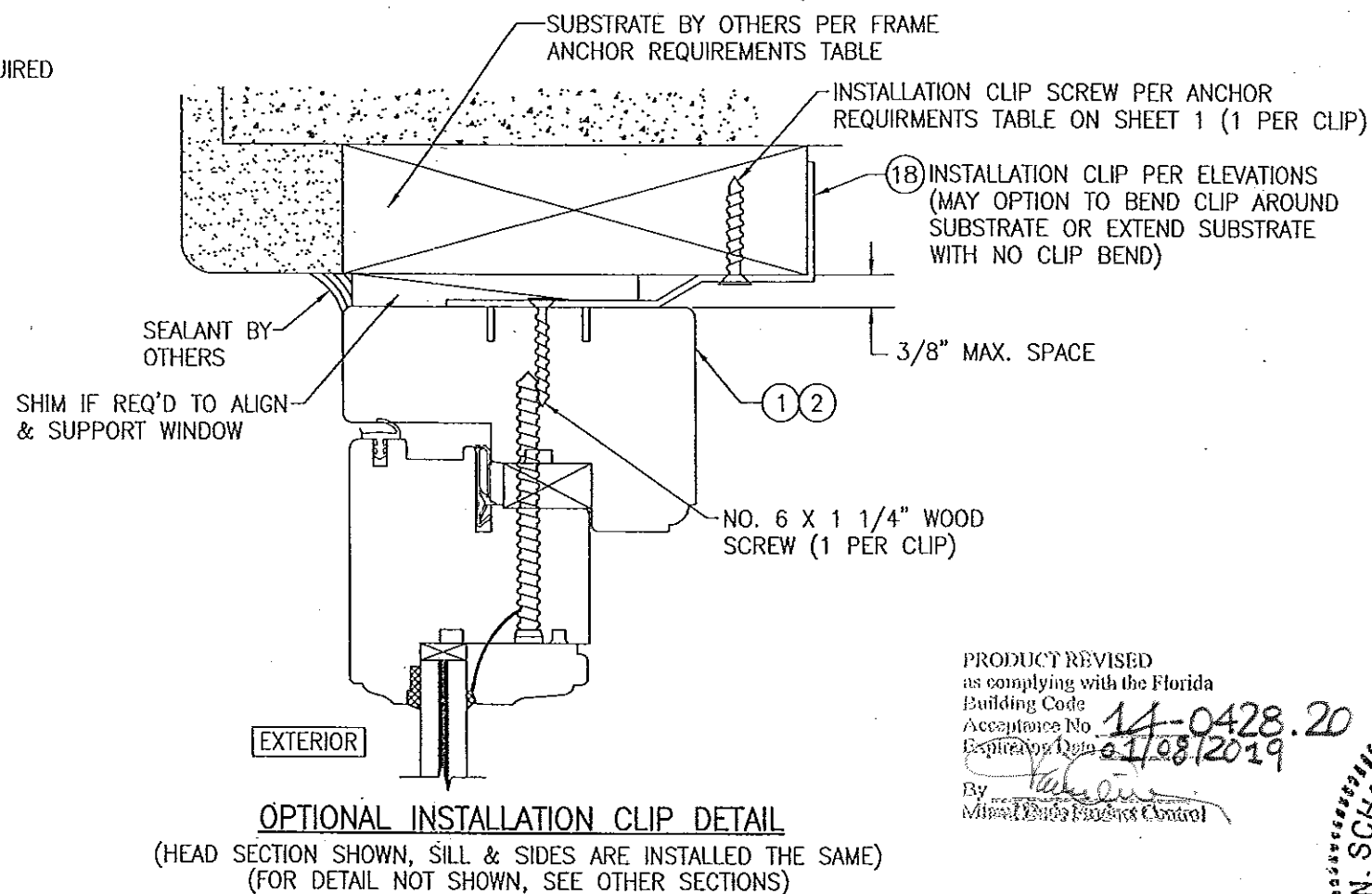
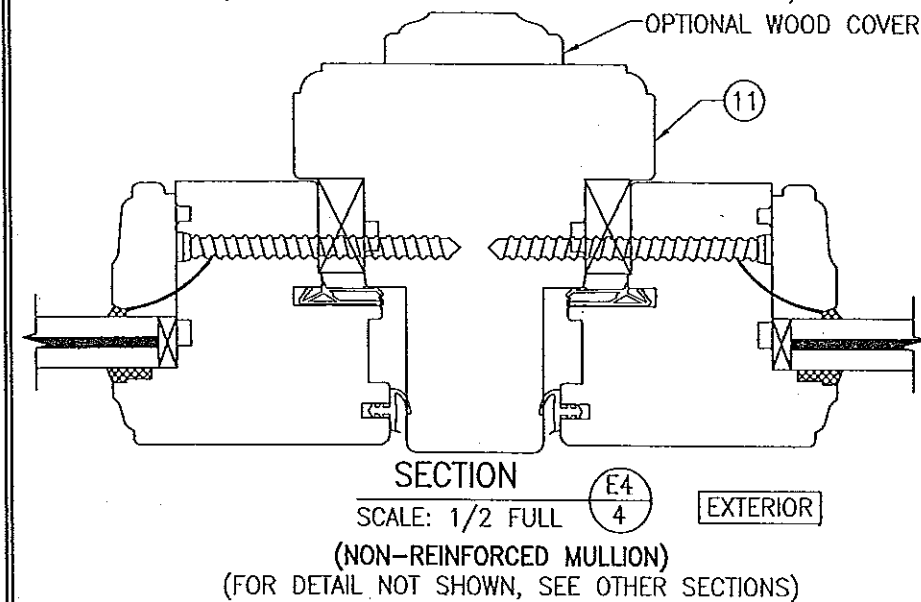
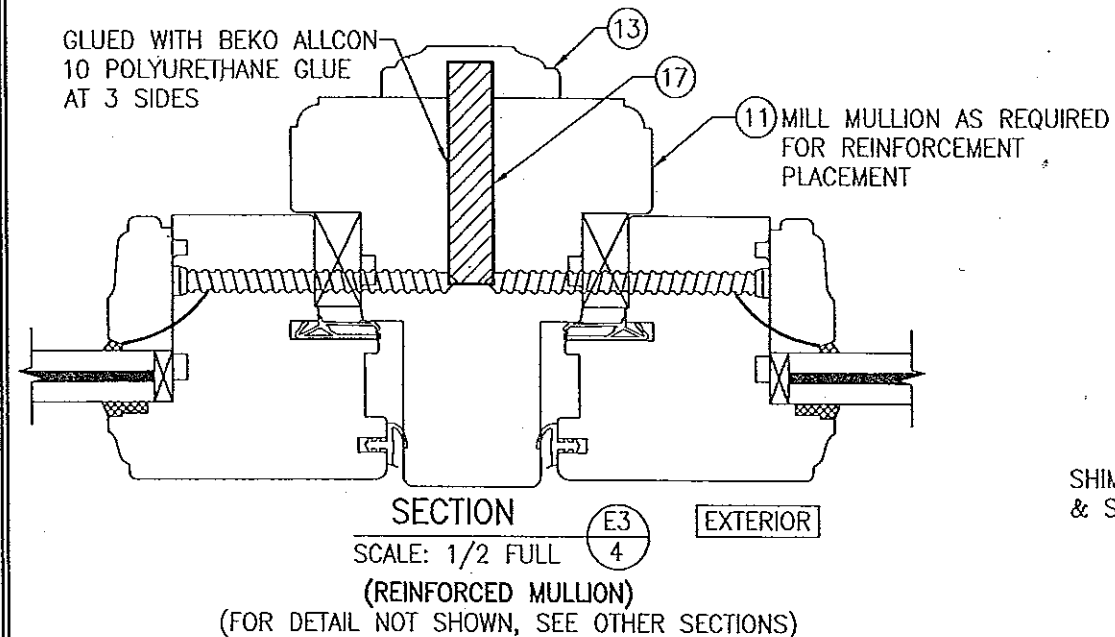
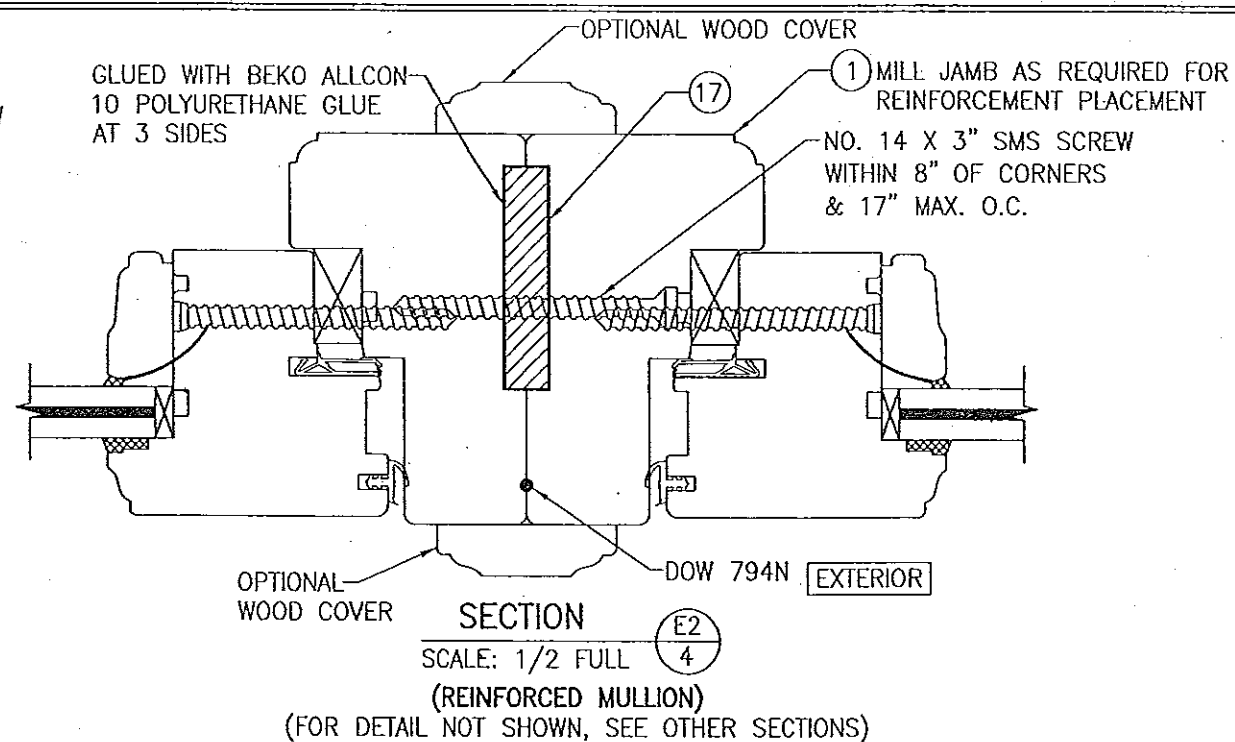
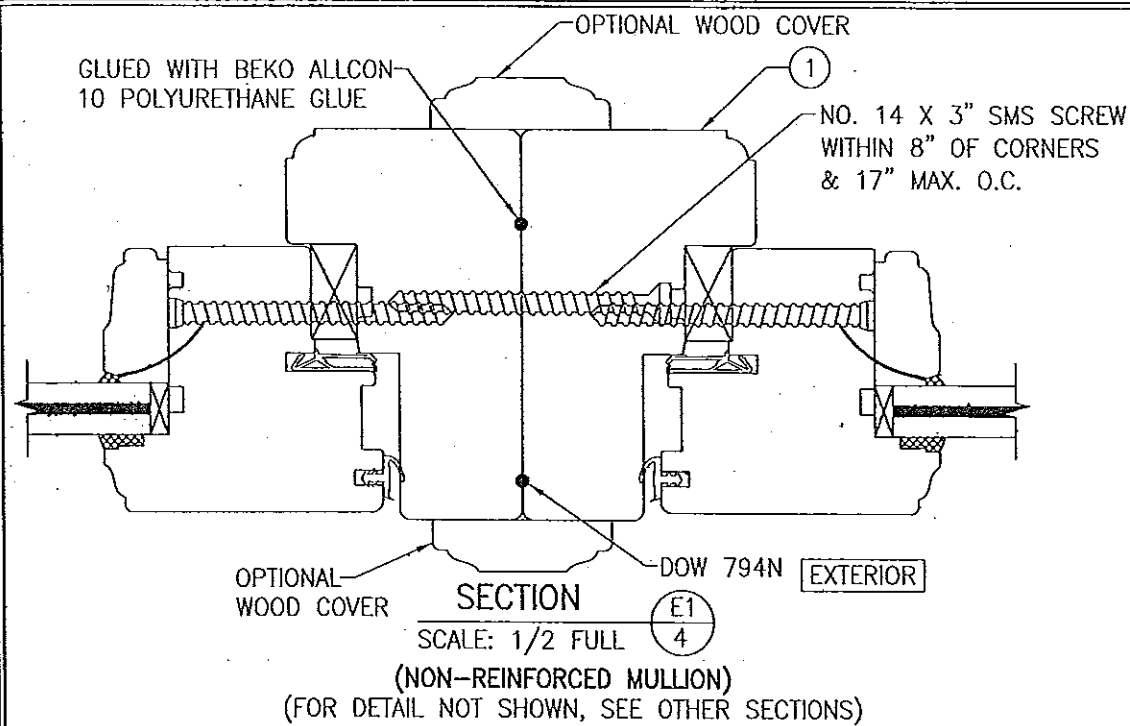
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 13-1105.07  
Expiration Date Jan. 8, 2019

By Manuel Perez  
Miami/Dade Product Control



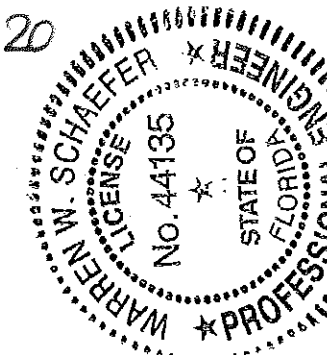
DRAWING NO.		REV.	B
SHEET NO.	3 OF 6		
CERTIFICATION SEP 04 2013  WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
DRAWING TITLE <b>OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW</b>			
MANUFACTURER <b>TISCHLER UND SOHN (USA) LTD.</b> SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600			
DRAWING BY: W.R.M.	PLOT:	CHECKED BY: W.W.S.	
DATE: 04/03/08	REVISION DESCRIPTION	BY	DATE
NO.			



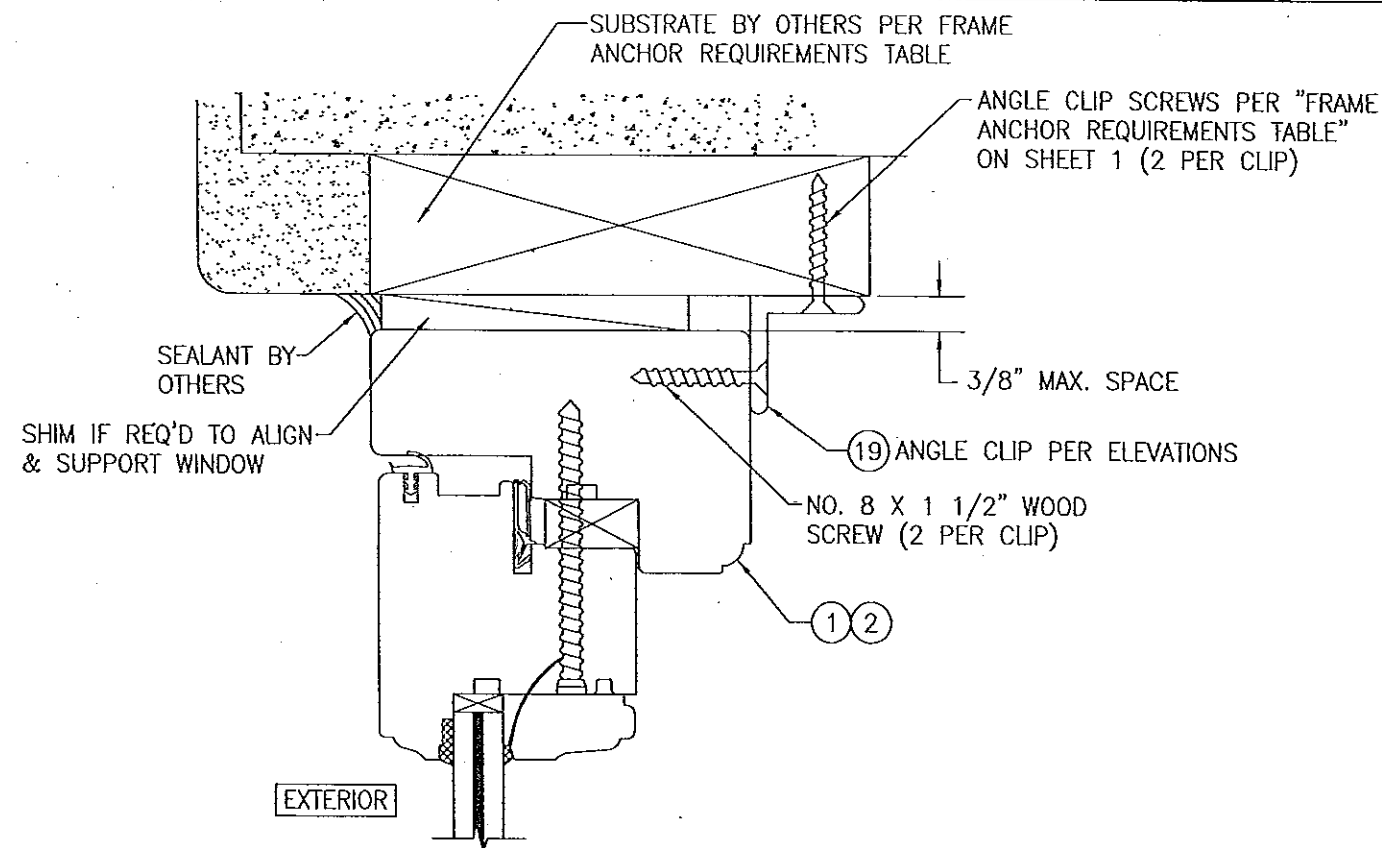


PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 14-0428.20  
Expiration Date 01/08/2019  
By *Warren W. Schaeffer*  
Miami Dade Product Control

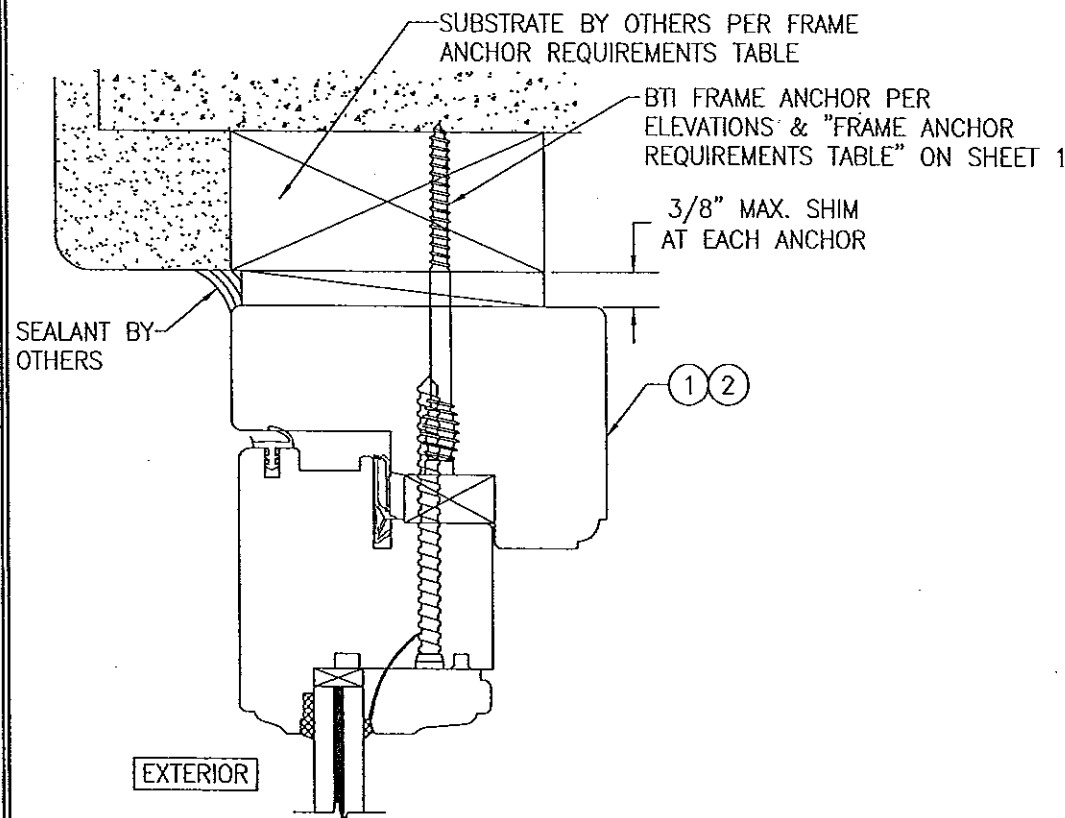
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 13-1105.07  
Expiration Date Jan. 8, 2019  
By *Warren W. Schaeffer*  
Miami Dade Product Control



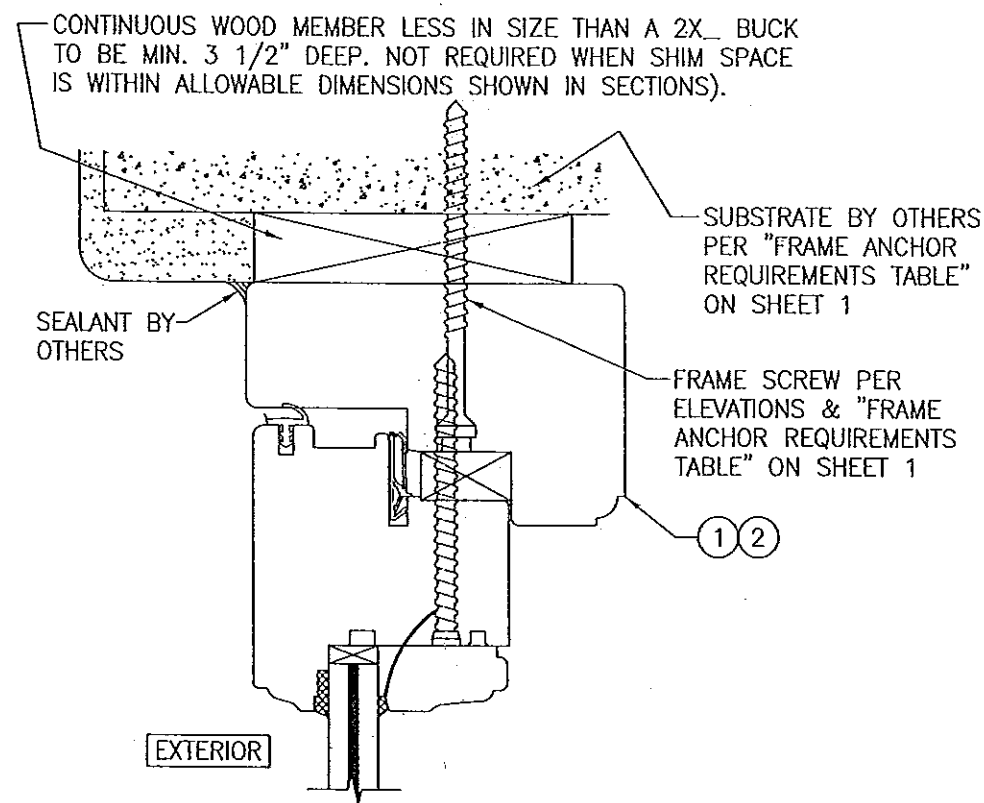
DRAWN BY: W.R.M.	CHECKED BY: W.M.S.
PLOT: 1=2	DATE: 04/03/08
DATE	BY
REVISION DESCRIPTION	NO.
<p>DRAWING TITLE: OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW</p> <p>MANUFACTURER: TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600</p> <p>CONSULTANTS: W. W. SCHAEFFER ENGINEERING &amp; CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424</p> <p>SEP 04 2013 WARREN W. SCHAEFFER, P.E. P.E. NO. 44135</p>	
DRAWING NO. 1533	REV. B
SHEET NO. 4	OF 6



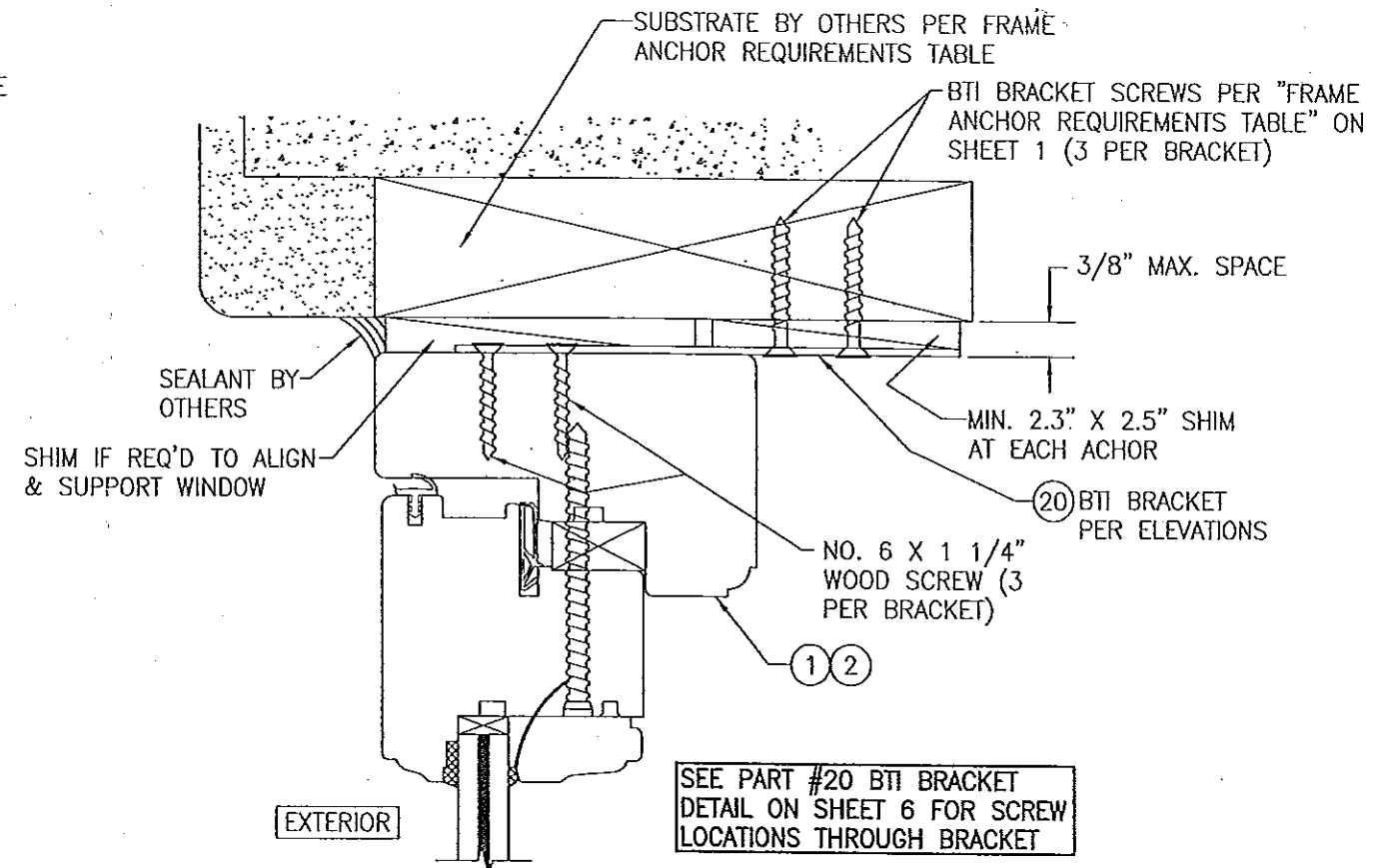
**OPTIONAL INSTALLATION ANGLE CLIP DETAIL**  
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



**OPTIONAL BTI SCREW DETAIL**  
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



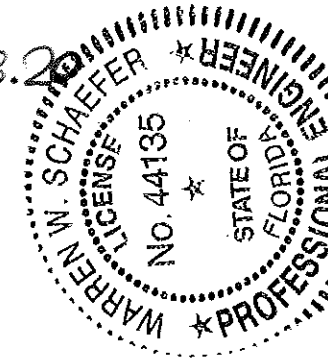
**OPTIONAL DIRECT MOUNT DETAIL  
TO SUBSTRATE WITH SPACER**  
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



**OPTIONAL INSTALLATION BTI BRACKET DETAIL**  
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)  
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 14-0428.20  
Expiration Date 01/08/2020  
By *Manuel Perez*  
Miami Dade Product Control

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 13-1105.07  
Expiration Date Jan. 8, 2019  
By *Manuel Perez*  
Miami Dade Product Control

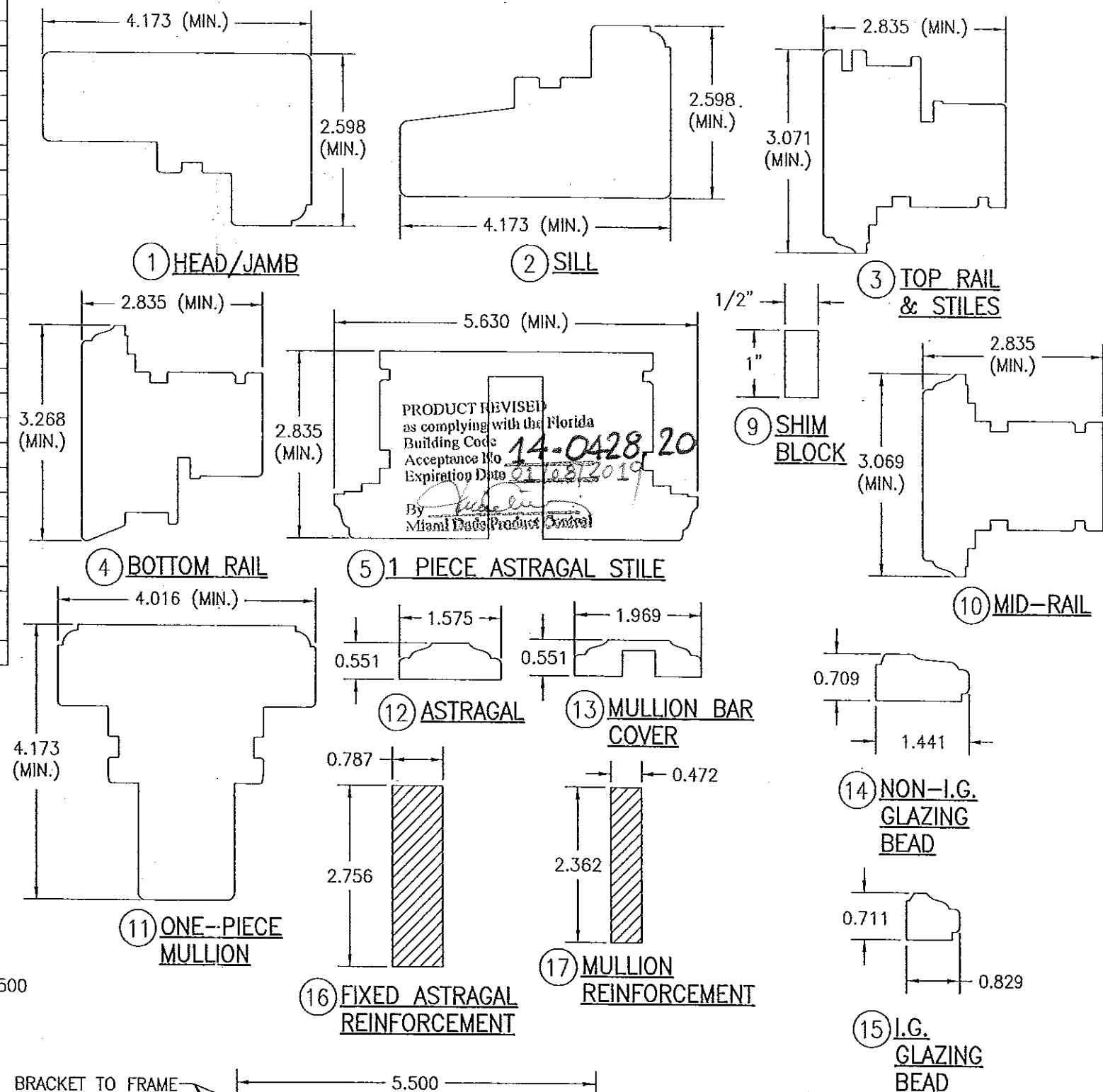


DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/03/03
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE: OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW	
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	MANUFACTURER: TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600
CERTIFICATION: SEP 04 2013 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING NO. 1533 REV. B SHEET NO. 5 OF 6



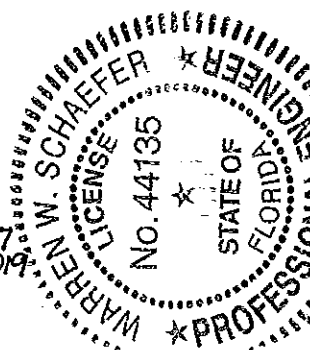
ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD/JAMB	MAHOGANY
2	SILL	MAHOGANY
3	TOP RAIL & STILES	MAHOGANY
4	BOTTOM RAIL	MAHOGANY
5	1 PIECE ASTRAGAL STILE	MAHOGANY
9	SHIM BLOCK	MAHOGANY
10	MID-RAIL	MAHOGANY
11	ONE-PIECE MULLION	MAHOGANY
12	ASTRAGAL	MAHOGANY
13	MULLION BAR COVER	MAHOGANY
14	NON-I.G. GLAZING BEAD	MAHOGANY
15	I.G. GLAZING BEAD	MAHOGANY
16	FIXED ASTRAGAL REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
17	MULLION REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
18	INSTALLATION CLIP	GALVANIZED 54 KSI STEEL
19	ANGLE CLIP	6061-T6 ALUMINUM
20	BTI BRACKET	GALVANIZED 54 KSI STEEL
SEALS & SEALANTS		
31	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
32	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
33	WEATHERSTRIP	THERMOPLASTIC ELASTOMER; BY: DEVENTER
FASTENERS		
36	OPTIONAL 18 GA. X 1 1/2" S.S. CURVED NAIL	4" FROM CORNERS & 12" MAX. O.C.
37	NO. 14 X 3 1/8" BAUTEC WOOD SCREW	WITHIN 8" OF ENDS & 17" MAX. O.C.

NOTE: WOOD USED IN TESTING WAS SIPO MAHOGANY WITH A SPECIFIC GRAVITY OF  $G = 0.62$  AND A MODULUS OF ELASTICITY OF  $E = 1,600,000$  PSI. OTHER WOOD SPECIES APPLICABLE FOR USE WITH THIS PRODUCT ARE THOSE WITH A SPECIFIC GRAVITY OF 0.62 AND MODULUS OF ELASTICITY OF 1,600,000 PSI OR GREATER. ALL WOOD IS MINIMUM GRADE 2 MILLED BY TISCHLER UND SOHN TO SELECT.



PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 14-0428-20  
Expiration Date 01/03/2019  
By *[Signature]*  
Miami Dade Product Control

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 13-1105-07  
Expiration Date Jan. 8, 2019  
By *[Signature]*  
Miami Dade Product Control



DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 04/03/08
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE OUT-SWING IMPACT WOOD FIXED CASEMENT WINDOW	
MANUFACTURER TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION SEP 04 2013 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1533	REV. B
SHEET NO. 6 OF 6	